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(56) Documents Cited
EP 1002824 A1   EP 0825231 A2   EP 0749155 A2
EP 0611067 A2   EP 0552852 A2   EP 0315953 A2
EP 0296433 A2   EP 0266918 A2   US 5922411 A
US 5770260 A   US 5665643 A   US 5614271 A
US 5310720 A   US 4950381 A
JP 2000-58646 & WPI Accession no 00-242464

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(54) Abstract Title
Spin-on glass composition and method of forming silicon oxide layer

(57) A silicon oxide layer is formed by coating on a semiconductor substrate having a surface discontinuity, an SOG composition containing perhydropolysilazane having a compound of the formula -$(SiH_2NH)_n$- wherein n represents a positive integer, a weight average molecular weight within the range of about 4,000 to 8,000, and a molecular weight dispersion within the range of about 3.0 to 4.0, to form a planar SOG layer. The SOG layer is convened to a silicon oxide layer with a planar surface by curing the SOG layer. Solvent is present in the composition in an amount of 70-90% by weight.

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